



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/525,144

10/13/2005

Hong Wang

678-1882

5612

66547 7590 07/26/2007
THE FARRELL LAW FIRM, P.C.
333 EARLE OVINGTON BOULEVARD
SUITE 701
UNIONDALE, NY 11553

EXAMINER

REGO, DOMINIC E

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/525,144	Applicant(s) WANG ET AL.	
	Examiner Dominic E. Rego	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 14-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Rune et al. (US Patent Application Publication #2002/0025815).

Regarding claim 14, Rune teaches a channel type switching (Abstract) method for a Multimedia Broadcast and Multicast service (MBMS) Point to Point (P-t-P) and Point to Multi Point (P-t-M) channel, when a UE having MBMS service moves to a cell in a Destination Radio Network Controller (DRNC) (Paragraphs 0047 and 0049) that has an Iur interface with a Serving Radio Network Controller (SRNC) (Figure 1A, Iur interface between elements SRNC and drift-RNC), comprising the steps of:

determining in the DRNC, to perform switching channel type between a common channel and a dedicated channel based on a number of users having the MBMS service in the cell (Paragraphs 0055, 0059);

notifying the SRNC of the determined MBMS channel type from the DRNC (Paragraphs 0061 and 0062);

notifying in the SRNC, the UE to reconfigure an MBMS channel via a Radio Resource Control (RCC) message in order to perform channel type switching to the determined MBMS channel type; and

transmitting MBMS data with the determined channel type to UEs requiring MBMS service (Paragraphs 0061 and 0062).

Regarding claim 15, Rune teaches the method, wherein said channel switching is at least determined based on comparing a number of UEs requiring MBMS service to a threshold (Paragraph 0066).

Regarding claim 16, Rune teaches the method, wherein said channel switching further comprises:

the SRNC transmitting a radio link setup request message to the DRNC including at least one MBMS service identifier (Paragraphs 0025 and 0061).

Regarding claim 17, Rune teaches the method, wherein said channel switching further comprises:

sending, by the SRNC, a radio link setup request message to the DRNC to request a radio link setup (Paragraph 0061);

determining, by the DRNC, channel type at least based on a number of UEs that require MBMS service and informing the SRNC of the channel type (Paragraphs 0055, 0059).

Regarding claim 18, Rune teaches the method, wherein said channel switching further comprises:

the SRNC sending a message to inquire about MBMS service type from the DRNC (Paragraph 0058 and 59);

the DRNC determining a channel type to be set up and informing the SRNC of the parameters of MBMS channel set up (Paragraphs 0061 and 0062); and

the SRNC completing setting up a dedicated channel or obtaining common channel information from the DRNC (Paragraphs 0061 and 0062).

Regarding claim 19, Rune teaches the method, wherein said message transferred from the SRNC to the DRNC comprises an MBMS service identifier (Paragraph 0058), which enables the DRNC to count a number of MBMS users (Paragraph 0066).

Regarding claim 20, Rune teaches the method, wherein, if the UE is first in requesting MBMS service in the DRNC, the DRNC sets up a radio access bearer (RAB) connection with a core network (Paragraphs, 0041, 0046, 0048 and 0061).

Regarding claim 21, Rune teaches a channel type switching method for a Multimedia Broadcast and Multicast Service (MBMS) Point to Point (P-t-P) and Point to Multi Point (P-t-M) channel in a radio network Controller (Paragraphs 0047 and 0049), comprising:

checking a number of User Equipments (Ues) in a cell to determine an MBMS channel type (Paragraph 0066);

determining the MBMS channel type by comparing the number of UEs that require MBMS service to a threshold (Paragraph 0066);

reporting change of the MBMS channel type to a serving radio network controller (SRNC) (Paragraph 0066); and

receiving in the SRNC, the MBMS channel type from a Destination Radio Network Controller (DRNC), and notifying in the SRNC, the UE to reconfigure an MBMS channel via a Radio Resource Control (RRC) message in order to perform channel type switching to the MBMS channel type.

Regarding claim 22, Rune teaches the method, further comprising:

receiving, at the SRNC, the MBMS channel type from a destination radio network controller (DRNC) (Paragraph 0061 and 0062); and

transmitting a channel reconfiguration request message to the UE (Paragraph 0061 and 0062).

Regarding claim 23, Rune teaches a channel type switching method for a Multimedia Broadcast and Multicast Service (MBMS) Point to Point (P-t-P) and Point to Multi Point (P-t-M) channel, comprising the steps of:

transmitting, from a Serving Radio Network Controller (SRNC), a radio link setup message to a Destination Radio Network Controller (DRNC) (Paragraph 0058);

transmitting, upon receiving the radio link setup message in the DRNC, an MBMS channel type to the SRNC (Paragraph 0061 and 0062);

notifying, at the SRNC, a User Equipment (UE) that requires MBMS service to reconfigure the MBMS channel type via a Radio Resource Control (RRC) message (Paragraph 0061, 0062 and 0063);

receiving, at the UE, the MBMS channel type (Paragraph 0061, 0062 and 0063);
and

receiving MBMS data on an MBMS channel using the MBMS channel type,
wherein the MBMS channel type is one of a dedicated channel or a common channel
(Paragraph 0061, 0062 and 0063).

Regarding claim 24, Rune teaches the method, wherein the radio link setup
message comprises an MBMS service identifier (Paragraphs 0025 and 0061).

Regarding claim 25, Rune teaches a data communication channel
establishment method for setting up multimedia broadcast/multicast service (MBMS)
with a core network (CN) via a destination radio network controller (DRNC), when a UE
moves to a cell controlled by the DRNC (Figure 1B), comprising the steps of:

a serving radio network controller (SRNC) sending a common transport channel
resource request message to the DRNC (Paragraph 0058);

the DRNC sending an MBMS service request message to the CN (Figure 1B and
Paragraph 0046, 0061, and 0062);

the CN requesting to set up a data connection with the DRNC (Figure 1B and
Paragraph 0046 and 0058); and

the DRNC sending a response message to the CN (Figure 1B and Paragraphs
0061 and 0062).

Regarding claim 26, Rune teaches the method, wherein the step of sending the
common transport channel resource request messages further comprises sending a
MBMS service identifier (Paragraphs 0025 and 0061).

Response to Arguments

3. Applicant's arguments filed 05/10/2007 have been fully considered but they are not persuasive. Regarding claims 14, 23, and 25, applicant argues that Rune does not teach to determining in the DRNC, to perform switching channel type between a common channel and a dedicated channel based on a number of users having the MBMS channel type from the DRNC. The examiner disagrees. In paragraphs 0020 0055, Rune teaches a second of the alternate ways of assigning radio resources when switching from dedicated channels to common channels in UMTS is for the network (UTRAN) to select the radio resources. When the user equipment unit (UE) is to switch to the common channels, the network sends information describing the network-selected resources to the user equipment unit (UE) via signaling messages in accordance with a physical channel reconfiguration procedure (described, e.g., in 3GPP TS 25.331, v.3.2.0 "RRC Protocol Specification") where 3GPP TS 25.331, v.3.2.0 does serve video and text messaging same as MBMS service and DRNC 26(2) knows how many users are in the cell based on the service they are requesting for. Likewise, applicant argues that Rune fails to teach notifying the SRNC of the determined MBMS channel type from the DRNC. The examiner disagrees. In paragraph 0061, Rune teaches step 100-3 of channel switching process 100 shows receipt at servicing radio network controller (SRNC) 26(1) of the response message 3-2 same as notifying the SRNC of the determined MBMS channel type (either common channel or dedicated channel) from the DRNC. Further, applicant argues that Rune fails to teach notifying in the SRNC, the UE to reconfigure an MBMS channel via a Radio Resource Control

(RCC) message in order to perform channel type switching to the determined MBMS channel type and transmitting MBMS data with the determined channel type to UEs requiring MBMS service. The examiner disagrees. Paragraph 0061, Rune teaches Step 100-3 of channel switching process 100 shows receipt at serving radio network controller (SRNC) 26.sub.1 of the response message 3-2. Following the receipt at step 100-3 of response message 3-2, channel-switching process 100 performs step 100-4. As step 100-4, channel switching process 100 issues a request 3-3 to the user equipment unit (UE) 30 involved with the channel switch-affected connection, the request of step 100-4 directing the user equipment unit (UE) 30 to switch to common channels.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic E. Rego whose telephone number is 571-272-8132. The examiner can normally be reached on Monday-Friday, 8:30 am-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dominic E. Rego



NAY MAUNG
SUPERVISORY PATENT EXAMINER